

EXHIBIT 1

U.S. Patent No. 8,289,939 (“’939 Patent”)**Accused Products**

For each and every claim identified below, the Accused Products include Defendant’s current, past, and future 3GPP 5G NR Radio Access Network (RAN) solutions and cellular base stations, O-RAN, vRAN and Cloud RAN solutions including radios and baseband units supporting 5G NR MIMO, Massive MIMO, active antenna systems / advanced antenna systems, and/or beamforming, including massive MIMO radios and basebands compliant with the 3GPP 5G Standard, that are provided to Defendant from Nokia or Ericsson.¹ The charts below describe (i) Nokia RAN Solutions, including, without limitation, O-RAN, vRAN and Cloud RAN solutions, including RAN solutions with MIMO or Massive MIMO radios; (ii) Ericsson RAN solutions, including without limitation, vRAN and Cloud RAN solutions including RAN solutions with MIMO or Massive MIMO radios (for example, without limitation, 16T16R, 32T32R, 64T64R Massive MIMO Radios), all of which perform beamforming in accordance with the 5G NR standard.

The following charts apply to each Accused Product because, as described below, each Accused Product implements MIMO wireless technology, including but not limited to functionality set forth in the 3GPP 5G NR Standard (a communications Standard to which each Accused Product is advertised as compliant) in a manner that causes each Accused Product to function in substantially the same manner with respect to the Asserted Claims (Claims 15, 17, 20-22, 30, 33-35).

Different Releases or versions of the relevant 3GPP documents or specifications may be cited herein, or relevant specification documents may be cited without reference to a specific release, but in each case it should be understood that unless otherwise indicated or shown, Defendant requires that each Accused Product comply with the specifications in relevant part as described below. Defendant furthermore configures and operates each Accused Product to operate in an infringing mode as described below.

Each claim limitation is literally infringed by each Accused Product. However, to the extent any claim limitation is not met literally, it is nonetheless met under the doctrine of equivalents because the differences between the claim limitation and each Accused Product would be insubstantial, and each Accused Product performs substantially the same function, in substantially the same way, to achieve the same result as the claimed invention. Notably, Defendant has not yet articulated which, if any, particular claim limitations it believes are not met by the Accused Products. Plaintiff reserves the right to expound on theories under the doctrine of equivalents upon receiving notice of whether and to what extent infringement of any claim limitations are disputed.

¹ Ericsson and Nokia are providers for Defendants.